

Title (en)

A diffusion bonded and superplastically formed turbomachine blade

Title (de)

Diffusionsgeschweißte und superplastisch geformte Turbomaschinenschaufel

Title (fr)

Pâle de turbomachine soudée par diffusion et formée superplastiquement

Publication

**EP 2469027 A2 20120627 (EN)**

Application

**EP 11194046 A 20111216**

Priority

GB 201021789 A 20101223

Abstract (en)

A diffusion bonded and superplastically formed turbomachine blade, the turbomachine blade comprising: a first layer (4); a second layer (6); and a membrane (2) disposed between the first and second layers (4, 6); wherein the membrane (2) is diffusion bonded to the first layer (4) along a plurality of first strips (10) and the membrane (2) is diffusion bonded to the second layer (6) along a plurality of second strips (12), wherein the first and second strips (10, 12) are offset from one another so that the membrane (2) is bonded to the first and second layers (4, 6) in an alternating pattern; wherein the membrane (2) has a recess (28) which extends into an area between an adjacent pair of first or second strips (10, 12).

IPC 8 full level

**F01D 5/14** (2006.01)

CPC (source: EP GB US)

**B21D 26/055** (2013.01 - GB); **B21D 26/059** (2013.01 - GB); **B23P 15/04** (2013.01 - EP US); **F01D 5/147** (2013.01 - EP US); **F01D 5/18** (2013.01 - EP US); **F05D 2230/236** (2013.01 - EP US); **F05D 2230/60** (2013.01 - EP US); **Y02T 50/60** (2013.01 - EP US)

Citation (applicant)

US 5479705 A 19960102 - FOWLER JOHN O [GB], et al

Cited by

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